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General Attorney
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July 5, 1995

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JUL - 5 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, DC 20554

Dear Mr. Caton:

On behalf of Capital Cities/ABC, Inc., transmitted herewith for filing with the Commission are an original and five copies of its Reply Comments in ET Docket No. 95-19.

If there are any questions in connection with the foregoing, please contact the undersigned.

Sincerely,

Dvora Wolff Rabino

DWR/ak
Enclosures

cc: Christopher D. Imlay (Atty. for American Radio Relay League)
Mario H. Gomez (Apple Computer Inc.)
Victor Tawil (Assoc. for Maximum Service Television, Inc.)
Jonathan D. Blake & Ronald J. Krotoszynski, Jr.
(Attys. for Maximum Service Television, Inc.)
John F. X. Browne (Assoc. of Federal Communications
Consulting Engineers)
Carl T. Jones (Carl T. Jones Corporation)
Eric Harslem (Dell Computer Corporation)
Harry H. Hodes (Electromagnetic Engineering Services, Inc.)
Patrick Richardson (Intellistor Open Area Test Site)
Randy Ortanez (PCTEST Engineering Laboratory, Inc.)
Randall B. Lowe (Atty. for Spirit Technologies, Inc.)
Charles M. Ludolph (U.S. Dept. of Commerce)
Michael F. Violette (Washington Laboratories, LTD.)

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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JUL - 5 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
Amendment of Parts 2 and 15 of the)
Commission's Rules to Deregulate) ET Docket No. 95-19
the Equipment Authorization)
Requirements for Digital Devices)

To: The Commission

REPLY COMMENTS OF CAPITAL CITIES/ABC, INC.

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July 5, 1995

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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
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Commission's Rules to Deregulate)	ET Docket No. 95-19
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DOCKET FILE COPY ORIGINAL

To: The Commission

REPLY COMMENTS OF CAPITAL CITIES/ABC, INC.

Capital Cities/ABC, Inc. ("Capital Cities/ABC"), the owner and operator of eight television stations and 21 radio stations and the ABC Television and Radio Networks, among other mass media and mass media-related enterprises, submits these reply comments in response to the Commission's Notice of Proposed Rulemaking ("Notice" or "NPRM") in ET Docket 95-19, released February 7, 1995.

SUMMARY OF ARGUMENT

In its Notice the Commission proposes to streamline procedures for marketing personal (Class B) computers and peripherals by eliminating the requirement that manufacturers wait for the Commission to pass on how much interference they radiate to radio, television, cellphone, and other means of wireless communications. The Commission proposes permitting manufacturers to self-certify compliance with the Commission's emission standards rather than

submitting sample devices to the Commission for testing and approval. (NPRM ¶¶ 1, 6-13.) It also proposes allowing personal computers to be self-certified based on tests of individual components without further testing of the completed assembly. (Id. ¶¶ 1, 14-25.)

Capital Cities/ABC supports the laudable goals of enhancing competitiveness of personal computer manufacturers and creating jobs by speeding the authorization process. Nevertheless, it believes that the current proposals pose a significant risk that these goals would be achieved at the expense of the signal integrity of wireless communications, including broadcast.

As some of the opening comments appropriately recognize, personal computer interference with wireless communications is already a real problem and is likely to become a bigger problem if PCs and their peripherals are no longer subject to unbiased, independent, expert testing and authorization before they are released to consumers. (See Section I, infra; see also comments of the Association for Maximum Service Television and the Association of Federal Communications Consulting Engineers.) After-the-fact remedies and sanctions for noncompliant products are simply not an effective substitute for prevention, particularly when FCC budget and personnel limitations make truly rigorous sampling and enforcement unlikely. (See Section II.) Furthermore, requiring only PC components and not the assembled products to satisfy emission standards is impractical because the level of radiation emitted by a computer is determined largely by the configuration,

packaging and interconnection of the component parts. (See Section III.) Finally, the need for compliance testing and enforcement by independent and unbiased experts is unintentionally but dramatically highlighted by the comments of one small computer component manufacturer, Spirit Technologies, Inc., which display a disturbing lack of knowledge and concern about the damage to wireless communications that its products can cause. (See Section IV.)

ARGUMENT

- I. Excessively Radiating Computers Already Cause Interference With Public Safety as Well as Broadcast Operations, and Such Interference Is Likely to Increase if Computer Companies Are No Longer Required to Submit to Pre-Release Testing by A Group of Unbiased and Independent Experts.

A number of commenters have substantiated the existence of a problem of excessive emissions from certain computers. As documented in the comments of PCTEST Engineering Laboratory, Inc., which cite cases of interference to aircraft systems obtained from the Federal Aviation Administration, personal computers and related devices used by airline passengers have emitted sufficient radiation to interfere with aircraft operations and potentially endanger passenger safety. If the FCC cannot maintain and improve emissions standards, the FAA -- which cannot be expected to test individual computers to determine which ones are safe to use and which are not -- may be forced to restrict or even ban the use of electronic computing devices on aircraft for safety reasons, just as the use of cellphones and radio receivers in general in flight

is currently prohibited. Such a generalized solution to the problem of excessively radiating personal computers would be a significant disservice to those people who need or desire to use notebook computers in flight.

Computer interference with public safety radio communications is also commonplace. A Capital Cities/ABC engineer, in connection with his frequency coordination and troubleshooting duties at public media events, has personally observed situations in which personal computers used by journalists covering these events have caused severe interference to the communications of security personnel assigned to protect senior public officials. Moreover, even in such cases of potential public danger, it has taken substantial time and persistence to locate and enlist the help of someone at the Commission to resolve the interference problems, and significantly more time and effort to locate the sources of the problems and to correct them.

Even devices far simpler than personal computers have been known to jam radio communications used in public safety services. As documented in the attached FCC news releases and AP news wire clipping, serious interference to police, air traffic control and other radio communications has been traced back to such diverse and seemingly unlikely sources as an electric power pole with a damaged in-line switch, a cash register in a Cooperstown, New York baseball memorabilia store, and even -- in one of the most memorable cases -- a musical Christmas tree ornament in a woman's house. Communications of private security concerns licensed other than as

public safety services -- for example, the Capital Cities/ABC security forces, which communicate under business band licenses, similar to those issued to taxi drivers -- are probably subject to additional risk by the lack of Commission resources for enforcement. Thus, the safety of "high-risk" individuals employing private security may be compromised if excessive PC emissions are not detected and corrected before the computers' release. See also American Radio Relay League Comments at ¶¶ 2, 6 (noting that many personal computers and peripherals cause significant interference to radio receivers, including amateur receivers in residences).

Personal computer interference with broadcast signals is even more ubiquitous and, because of the Commission's apparent lack of resources for correcting such non-public-safety-related problems after they occur, even more of a potential problem. Unlike commercial computers, personal computers can be used anywhere, at any time, and are typically found in the home, in extremely close proximity to television and radio sets. Any computer user can interfere with his or her housemates' or neighbors' ability to watch TV or listen to radio by simply turning on a computer that emits excessive radiation.

Anecdotal evidence of such interference is readily available. For example, Capital Cities/ABC engineer Kenneth Brown reports that when he turns on the late 1970s model U.S.-made computer in his den -- a computer that met federal standards in effect when it was manufactured -- the picture on the television in an adjacent room, 20 feet or more away, is degraded, even though the television is

operating on an amplified rooftop antenna. Robert O. Niles, Capital Cities/ABC's Vice President and Director of Engineering for the company's owned television stations, reports having owned an early IBM PC that caused even more severe interference to radio and television reception in the home. Mr. Brown also reports that in the late 1970s, when computer games were first being introduced, compliance testers at the consulting firm by which he was then employed, which operated a compliance test laboratory, used to spend days repeatedly modifying the shielding and other aspects of these computer devices before they became "quiet" enough to pass inspection.

The Notice claims that there is no need for Commission involvement in the authorization process given what the Commission has described as a "current high rate of compliance and lack of significant interference from personal computers and their peripherals." Notice ¶ 5. Based on the experiences of our engineers and that of PC testing companies (see, e.g., Comments of Washington Laboratories Ltd. at page 3), we believe that if the FCC does not receive significant complaints of PC interference with broadcast signals, it is because most potential problems are corrected through extensive testing and modifications in anticipation of the FCC's objective compliance testing. In addition, when interference does occur, the Commission typically does not hear about it because the television and radio viewers and listeners suffering such interference do not recognize the cause of the problem or do not know to whom to direct their complaints.

Interference with broadcast signals is likely to increase significantly unless an unbiased, independent group of experts (whether governmental or private) continues to check the emissions of personal computer-related devices before they are released to the public.

II. Preventive Measures Should Not Be Relaxed Absent
After-the-Fact Enforcement Measures That Can
Adequately Protect Against Harmful Interference.

Sanctions for excessive emissions, especially for routine excessive emissions from a product group or line due to inadequate design as opposed to sample defects, were mentioned seldom in the comments and only in the most general terms. Footnote 13 of the Notice suggests that sanctions for marketing noncompliant products could be monetary forfeitures and requiring that importation and marketing of such equipment cease immediately. This is simply not adequate. Monetary forfeitures have to be immense to offset the money that can be saved by manufacturers by not doing proper testing or correction of problems found in products. Stopping the marketing of a noncompliant product after large quantities of that product have already been sold, which is a likely scenario given the lack of enforcement resources, does nothing to recall noncompliant products already sold and to remove them, and the damage they cause, from the public. It is necessary not only to get retail sales stopped but also to make sure most or all of the noncompliant product is recalled for correction in order to stop

the excessive emissions. Such a recall process would be difficult and expensive to implement and enforce.

European countries that have adopted streamlined authorization procedures have effective "RF cops" who actively police devices for excessive RF interference, disconnect noncompliant devices, and impose large fines on manufacturers for excessive interference. In contrast, the Commission is functioning under budgetary constraints and cutbacks in field operations and enforcement efforts that make a rigorous sampling and testing program unlikely. See the comments of PCTEST at 1c, of Carl T. Jones Corp. at page 4, and of International Compliance Corporation at ¶ 7.¹ We respectfully suggest that the Commission should not loosen the procedures for preventing excessive RF emissions unless it truly has the resources, personnel and procedures in place for the foreseeable future to monitor, and to force manufacturers to correct, any inappropriate interference that may result. In our experience these resources, personnel and procedures do not currently exist.

The international reciprocity concerns raised by the United States Department of Commerce also appear deserving of close consideration. In addition, it is critical that this country not become a "dumping ground" for products that do not meet other countries' RF radiation emission standards. See Comments of Carl T. Jones Corp. at page 4.

¹ Europe also has higher operating powers or service areas defined by higher minimum signal strengths for some radio services, especially AM, resulting in a higher interference level generally being necessary to interfere with the service.

III. Testing Components Is Not an Adequate Substitute For Testing Finished Products.

The problems with testing components only, rather than testing the assembled product, were picked up by almost all commenters. Particularly cogent are the comments of Electromagnetic Engineering Services, Inc. ("EESI") at page 12, International Compliance Corporation at ¶ 7, Intellistor Open Area Test Site at items 5 & 14, Washington Laboratories Ltd. at page 3, and Dell Computer Corporation at page 2.

Paragraphs 14, 17, and 18 of the Notice all share the same two fatal flaws. The shielding supplied by the case and the amount of radiation from the wiring harness connecting two or more boards within the case are critical parameters in determining emissions from a system. More specifically, a marginal board may be acceptable if shielded by a metal case, but may not be acceptable if enclosed in the plastic case of a different system, especially if the plastic case is not internally coated with a metallic layer. And shielding in a computer system, particularly a portable computer, tends to be minimized to reduce cost and weight. Equally important, signals travel on wires connecting boards, and the length and placement of those wires can cause them to act as more or less efficient antennas to radiate as well as carry signals. Control of wire placement is known as "lead dress," and Capital Cities/ABC RF engineers have been well familiar with multitudinous "lead dress" RF problems for decades. Unless the Commission intends to require that all signals carried between boards in a

computer be inside shielded transmission lines, which is a bit impractical, an unusual length and/or placement of an unshielded wiring harness can cause excessive radiation. It is necessary to determine the worst case of interconnecting lead length and placement when considering how much signal could possibly be radiated from a component board. These difficulties are acknowledged in ¶ 19 of the Notice. However, ¶ 19 also talks about the "small risk that certain combinations of components might not comply with our standards", which we believe greatly understates the case.

One option suggested by Apple Computer, Inc. (Comments at VI), to require components to meet specifications 6 dB tighter than complete systems, is interesting but may be impractical or impossible of realization (see EESI at page 12, last par.). Unfortunately, given the evidence of existing interference problems discussed in Part I of these reply comments, Apple's second alternative suggestion, to test components to present Class B limits and complete systems to Class A limits, is unreasonable and unacceptable.

IV. The Comments of Spirit Technologies Exemplify A Lack Of Appreciation for Potential Interference Problems On The Part of Some Smaller Computer Component Manufacturers.

One set of comments, that of Spirit Technologies, Inc., exemplifies a lack of appreciation for potential interference problems on the part of some smaller computer component manufacturers. By failing to credit the significance of problems

potentially caused by its own equipment, Spirit's comments underscore the need for an expert and objective authority to enforce PC RF radiation standards and thereby to protect the public from the problems caused by excessive emissions.

First, contrary to Spirit's suggestion (at page 2), the role of the Federal Communications Commission with respect to personal computer authorization is not primarily to encourage the development of small businesses such as Spirit that manufacture personal computer products but, far more fundamentally, to continue to protect the products (communications) of broadcasters, paging companies, and other companies who either supply or depend upon radio communications, the vast majority of which are also small businesses, from disruption by excessive and unnecessary RF emissions from the products of companies like Spirit.

Second, the power usage of a piece of equipment does not necessarily have anything to do with the amount of RF emissions produced by the device, so the test proposed by Spirit at page 3 is meaningless. Indeed, a desktop computer contained in a metal case may be much better shielded against the escape of emissions than a much lower power notebook computer with a plastic case.

Third, Spirit completely ignores the inverse square law. It is well known that the amount of emissions from a device experienced by an observer decreases as the inverse square of the distance from the emitting device. Contrary to Spirit's entire argument at B, Class A devices are intended to be considerably farther from members of the general public (whether they really are

or not, given the proximity of some offices, especially medical offices, to residences in areas of high density population) than Class B devices, which may be in the next room or even the lap of the person in the next seat, and so it is absolutely necessary that the levels of emissions from Class B devices be closely controlled.

Finally, Spirit's comments at section III specifically ignore the problems of connections, wiring, and lead dress discussed in section III above. In short, by demonstrating a lack of knowledge or concern for the interference its products can cause, Spirit's comments highlight the continued need for some kind of expert and objective PC evaluation and testing process similar to the process that the Commission is now proposing to abandon.

CONCLUSION

Capital Cities/ABC is sensitive to the concerns of computer manufacturers that wish to market their products expeditiously. However, broadcast and other wireless communications already experience interference from excessively radiating personal computers. Moreover, with each passing day, PC-type devices become smaller, lighter, more portable, more ubiquitous, more multifunctional, more apt to be rushed to market, and more likely, in light of all these factors, to cause interference with television, radio and other wireless communications. Now, more than ever, effective safeguards are needed to ensure that the much

touted "information superhighway" or PC explosion is not achieved at the expense of existing communication and broadcast services.

Respectfully submitted

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July 5, 1995



NEWS

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET, N.W.
WASHINGTON, D.C. 20554

News media information (202) 418-0500
Recorded listing of releases and texts
(202) 418-2222

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCI v. FCC, 515 F.2d 385 (D.C. Cir. 1974).

February 23, 1995

COMPLIANCE AND INFORMATION BUREAU ACTIVITIES

ASSISTANCE TO NAVY:

Air Traffic controllers from the Alameda Naval Air Station complained to the FCC's San Francisco office about not being able to communicate reliably on one of their air control frequencies. FCC engineers, using mobile direction-finders, monitored the interference and found that it was coming from the Navy's own air traffic control. Further investigation, using hand held receivers, pinpointed the problem to the computer used for flight data processing. Shutting down the processing operation relieved the interference at the tower.

INTERFERENCE ON MARINE DISTRESS CHANNEL:

The U.S. Coast Guard called the FCC's Seattle office to report a signal on Marine Channel 16 that was blocking communications in the Puget Sound area. Channel 16 is used for emergency distress calls. An engineer from the FCC's Seattle office, using mobile and then portable direction-finding equipment, located the signal to the DAGMERS' pleasure boat that was found to have a transmitter that would intermittently transmit. The vessel was boarded by marina security personnel who found that a fisherman's downrigger had accidentally pushed against the transmitter's microphone causing it to transmit. Once identified, the problem was resolved.

ILLEGAL EQUIPMENT COLLECTED:

The FCC's Denver office received complaints that an association of Citizens Band (CB) Radio operators identified as the "Delta-Lima Group," in the Grand Junction, CO, area, were operating on unauthorized frequencies not assigned to the CB Radio Service. FCC investigators identified three principle members of the group, who voluntarily relinquished approximately \$3600 worth of high-powered amplifiers and uncertified transmitters. To their surprise, other Delta-Lima members from other parts of the country also turned in an additional \$1200 worth of illegal equipment to the FCC. All of the equipment has been destroyed.

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NEWS

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET, N.W.
WASHINGTON, D.C. 20554

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44759

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September 14, 1994

FIELD OPERATIONS BUREAU ACTIVITIES

INTERFERENCE TO ARMY SECURITY OFFICE:

The FCC's Baltimore office received a complaint of radio communications interference from the Department of Army Security Office at Cameron Station, Alexandria, VA. Through direction-finding techniques, FCC investigators homed-in on the offending signal to an area of a car dealership showroom. Closer inspection at the showroom revealed that the problem was from a Mitsubishi television receiver in the showroom office, which was radiating an unwanted signal. Simply unplugging the receiver resolved the problem and the car dealer management agreed to have the receiver repaired.

HIGH POWERED TRANSMITTERS INTERFERE:

The FCC's Norfolk office responded to congressional complaints from constituents in the Lexington, NC, area about interference to telephones, CB emergency, and motorists assistance communications. In the course of investigating these problems, FCC engineers uncovered many high powered radio frequency amplifiers, some of which were boosting the normal legal four watt CB stations to more than 4000 watts. The individuals caught with the illegal equipment surrendered it to the FCC. As a result, the quality of local telephone and authorized CB radio communications in the area improved significantly.

ASSISTANCE TO CIVIL AIR PATROL:

The Civil Air Patrol asked for assistance in finding the source of interference to the emergency locator transmitter (ELT) frequency in the Morrisville, PA, area. FCC engineers from the Philadelphia office were able to identify the signal as coming from an electric power pole where a damaged in-line switch was arching and could block an ELT transmission from a crashed airplane. The Philadelphia Electric Company is making the repairs to the pole which had been hit by a motorist just before the problem occurred.

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NEWS

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET, N.W.
WASHINGTON, D.C. 20554

19311
News media information (202) 418-0500
Recorded listing of releases and texts
202 / 632-0002

44580

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August 31, 1994

HIGH PROFILE FOB ACTIVITIES

FALSE DISTRESS CALL:

The Coast Guard asked the Anchorage Office to assist with a marine distress call that they suspected could be false because they could hear the background noise of jet airplanes taking off. FCC investigators used mobile direction-finding equipment to identify two teenage boys with a hand-held transmitter calling MAYDAY from their bicycles along the shores of Lake Hood which is at the edge of Anchorage International Airport. The boys' parents were issued warning letters explaining the seriousness of the false message. The Coast Guard spent more than \$13,000 per hoax call last year in Alaska.

SATELLITE DATA USER SEES THE LIGHT:

The FCC received a complaint from a satellite downlink operator in central Pennsylvania that digital data from the GOES weather satellite was being interfered with. An engineer from the Laurel Office travelled to the area to investigate and discovered a sporadic signal transmitting on the same frequency. Using microwave monitoring equipment, the FCC engineer traced the source of interference to a malfunctioning mercury-vapor street light in a parking lot 500 feet behind the satellite dishes. Ironically, the complainant, looking for probable nearby sources of interference had tested several street lights a few days earlier with the help of the local power company but missed the problem lamp. The investigation surfaced several other nearby devices that would potentially cause interference to the sensitive low-noise amplifier, including air-conditioner compressors, computer terminals, and cordless telephones.

MARINE RADIO INTERFERENCE:

The U.S. Coast Guard contacted the Kansas City Office to report interference to the marine distress and calling channel, 16, in the Hannibal, Mo., area. The interfering signal contained fragments of what sounded like a radio amateur call sign. FCC investigators searched through license database records and contacted several amateur radio repeater station trustees in the Hannibal area

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NEWS

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET, N.W.
WASHINGTON, D.C. 20554

News media information (202) 418-0500
Recorded listing of releases and texts
202 / 632-0002

18421

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCI v. FCC, 515 F.2d 385 (D.C. Cir. 1974).

44371

August 16, 1994

FIELD OPERATIONS BUREAU ACTIVITIES FOR THE WEEK OF AUGUST 7

INTERFERENCE TO STATE POLICE:

The Florida Department of Law Enforcement contacted the FCC's Tampa office to report that their police radio communications were being locked by an unknown signal. FCC engineers, using mobile direction-finding techniques, traced the problem to the security staff for the company filming the TV show "seaQuest DSV" at St. Petersburg, FL. The frequency and equipment used were not authorized for the St. Petersburg location and were creating the interference to the police. FCC inspectors also discovered that the TV film crew was using unlicensed VHF hand-held radios. The Tampa office assisted the company in getting an STA on a frequency that caused no problems.

ONE STRIKE AGAINST THE MICK:

The local police department in Cooperstown, N.Y., called the FCC's Buffalo office to report interference on one of their frequencies. According to the police, the interference seemed to be localized in an area of the city close to the Baseball Hall of Fame. An on-scene investigation by a FCC engineer using direction-finding equipment pinpointed the source to be a cash register used by the Mickey's Place baseball memorabilia store. FCC investigators instructed the store management to take corrective action.

LIGHTNING CREATES PROBLEMS FOR POLICE:

The Hatfield Police Department in Montgomery County, PA, contacted the FCC's Philadelphia office to report an interference problem from an unknown source. FCC investigators determined the cause of interference to be transmissions from a local government station in the Borough of Lindenwold, PA, which is 40 miles from Hatfield. Apparently, lightning damage had caused the town's transmitter to interfere with the Hatfield Police. A technician for Lindenwold was already at the transmitter site working to correct the problem.

(over)

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Woobang Corporation NAL/Acct No. 315HF0033
Youngdeungpo-Gu
Seoul, Korea

Liability for
Monetary Forfeiture

NOTICE OF APPARENT LIABILITY

Adopted: August 18, 1993; Released: August 25, 1993

By the Field Operations Bureau:

I. INTRODUCTION

1. This is a Notice of Apparent Liability for Monetary Forfeiture issued pursuant to Section 503(b) of the Communications Act of 1934, as amended (the Act), 47 C.F.R. § 503(b), and 1.80 of the Commission's Rules, 47 C.F.R. § 1.80, to the Woobang Corporation, grantee of FCC ID: JGHWB-900ATX for marketing the Child Search System device, a radio frequency device that was authorized under Part 15 of the Commission's Rules, in violation of Sections 2.931 and 15.231(e) of the Commission's Rules, 47 C.F.R. §§ 2.931, 15.231.

2. The appropriate amount of forfeiture for this violation is \$7,000.

II. BACKGROUND

3. On March 2, 1993, an FCC investigator from the Chicago Office visited Davidcraft Corporation, a distributor of the Woobang Corporation's Child Search System device, and requested a sample of the device for post grant testing. Commission engineering personnel from the Sampling and Measurements Branch, Authorization and Evaluation Division, Office of Engineering and Technology (the FCC Laboratory), conducted tests on the sample, and found that it did not comply with radiated emissions limit and the periodic emissions limit required by Section 15.231(e).¹

III. DISCUSSION

4. As a condition attendant to a grant of an equipment authorization, the grantee warrants that each unit of equipment marketed under a grant will be representative of the unit, and conform to the specifications of the unit that was

measured for the grant. See 47 C.F.R. § 2.931. The Woobang Corporation was issued a grant under FCC ID: JGHWB-900ATX on September 9, 1992 to manufacture and market the Child Search System Transmitter.

5. Test measurements of the post-grant sample device indicated that the unit as marketed was not representative of the sample authorized by the Commission under the grant. The marketing of these non-conforming devices is prohibited by Section 2.803 of the Rules, 47 C.F.R. § 2.803, and may lead to revocation or withdrawal of the equipment authorization. See 47 C.F.R. § 2.939.

IV. CONCLUSION

6. Pursuant to the Commission's policy for assessing forfeitures, see 1993 Policy Statement, *Standards for Assessing Forfeitures*, FCC 93-382 (released August 12, 1993), and Section 503(b)(2) of the Act, the base forfeiture amount for marketing devices in violation of Commission certification requirements under Sections 2.931 and 15.231(e) is \$7,000.

7. The appropriate amount for this forfeiture is therefore \$7,000. No further adjustments appear warranted.

V. ORDERING CLAUSES

8. Accordingly, pursuant to Section 503(b) of the Communications Act, and Section 1.80 of the Commission's Rules, IT IS ORDERED, that the Woobang Corporation IS APPARENTLY LIABLE FOR A MONETARY FORFEITURE in the amount of seven thousand dollars (\$7,000) for willful violation of Section 302 of the Communications Act, and Sections 2.931, and 15.231(e) of the Commission's Rules.

9. IT IS FURTHER ORDERED, pursuant to Section 1.80(f)(3) of the Commission's Rules, that the Woobang Corporation shall, within 30 days of release of this Notice pay the full amount of the forfeiture or file a written response showing why the forfeiture should be reduced or not imposed. Any statements regarding inability to pay must be supported by appropriate documentation.² Send written responses regarding why the forfeiture should be reduced or not imposed to:

Federal Communications Commission
Field Operations Bureau
Enforcement Division
ATTN: NAL No. 315HF0033
RM 744, Mail Stop AC/1500E3
1919 M Street, N.W.
Washington, D.C. 20554

¹ Radiated emissions at 3 meters were +8.5 dB, +10.0dB, and +12.5dB over the limit. Periodic emissions were 0.57 seconds in duration, with silent periods of 1.3 seconds between transmissions, less than the corresponding 17.1 seconds which would apply to a 0.57 second transmission time, and less than the 10

second minimum silent period allowed under. See 47 C.F.R. §15.231(e).

² Claims of inability to pay should be supported by tax returns or other financial statements for the most recent three years.

SLUG	TAKE	FROM	MOVED	STATUS	TIME
PM-Lite--ReindeerRadio	1 0549	APa-----ar	Fri Dec 18 11:12	WIRE	1:37

PM-Lite--ReindeerRadio 12-18 0311
 PM-Lite--Reindeer Radio,0304

Christmas Spirit Becomes Police Radio Gremlin

LANCASTER, Pa. (AP) -- Police in patrol cars were amused when strains of "Jingle Bells" began playing on police radios all over the city.

"They thought somebody cited Santa Claus," police Capt. Ralph McComsey said.

But when the music continued, it interfered with radio communications.

"By noon it was really bad," McComsey said. "It was like listening to a record. It wiped out our transmissions completely."

Police called in the Federal Communications Commission, which tracked the problem to the home of Blanche Cosgrove.

Cosgrove answered her door Wednesday to find two men wearing headphones and carrying electronic gear, asking to inspect her Christmas decorations.

"I was dumbstruck," she said. "They asked if I had anything in the house playing Christmas carols."

She showed them a musical ornament decorated with three plastic reindeer whose noses light up.

"I turned it on and off and he listened with his headphones and said, 'That's it!'" Cosgrove said.

Officials were still puzzling Thursday over how the tiny caroling reindeer caused the interference the day before.

"This is a very, very strange case," said Gertrude Anderson, public affairs specialist at the FCC office in Philadelphia.

She said the ornament apparently was emitting a signal on the exact frequency as police transmissions. The signal was picked up and amplified by a police radio repeater antenna two blocks away.

FCC officials promised Mrs. Cosgrove they would try to fix whatever was causing the interference and return it to her. Otherwise, they would pay her for it.

The box for the "Holiday Reindeers" ornament says it was made in China for Tony Inc. of New York. There was no answer this morning at a number for the company.

AP-NY-12-18-92 1112EST